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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/044,333 | 01/11/2002 | Nir Ben-Dvora | 1370.020US1 | 7983 |
| 21186 | 7590 | 05/02/2006 | EXAMINER | |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402 | | | MATTIS, JASON E | |
| | | ART UNIT | | PAPER NUMBER |
| | | 2616 | | |

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/044,333 | BEN-DVORA ET AL. |
| | Examiner | Art Unit |
| | Jason E. Mattis | 2616 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) 1-8 and 13-22 is/are allowed.
- 6) Claim(s) 9-12 and 23 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/02</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, claim 23 is a claim directed towards a single concentrator. This claim includes the limitation "means for configuring said concentrator so as to connect said plurality of nodes to form bi-directional dual counter-rotating optical rings". It is made clear in the specification that the Applicant's invention involves two concentrators that work together to by connecting nodes to form bi-directional dual counter-rotating optical rings. No embodiment of the Applicant's inventions shows nodes being connected to form these rings using only a single concentrator. This claim omits the essential element of the second concentrator. It is recommended that this claim be rewritten to include both concentrators as required by the description of the invention in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2616

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (U.S. Pat. 5663950).

With respect to claim 9, Lee et al. discloses a method of connecting nodes to a first and second concentrator to form a dual ring network including inner and outer rings (**See column 7 line 31 to column 8 line 51 and Figure 1 of Lee et al. for reference to a method of connecting stations 24, which are nodes, to a first and second reconfiguration units 10 and 20, which are concentrators, to form a dual ring network with an inner and outer ring**). Lee et al. also discloses configuring the first concentrator and second concentrator to connect the B interface of a node to the A interface of a neighbor node, connect the B interface of the last node to the A interface of the first node, and connect a pair of optical fibers between the concentrators if the number of nodes is odd (**See column 7 line 31 to column 8 line 51 and Figure 1 of Lee et al. for reference to connecting stations 24 such that the are connected in a ring with an A side of each node connected to a B side of a neighbor node with the first an last nodes connected to close the ring, and for reference to connecting cables between the concentrators 10 and 20**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2616

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of the "Enhanced Intelligent Protection Switching (E-IPS)" paper (as disclosed in the Applicant's IDS dated 1/2002, hereafter referred to as *E-IPS*).

With respect to claims 10-12, Lee et al. does not disclose that the nodes are routers and that the routers and concentrators are adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol.

With respect to claims 10-12, *E-IPS*, in the field of communications, discloses a ring network with nodes that are routers, as well as, routers and concentrators adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol
(See pages 1-6 of E-IPS for reference to routers and concentrators used to connect dual optical ring networks with the routers and concentrators adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol).

A ring network with nodes that are routers, as well as, routers and concentrators adapted to run Spatial Reuse Protocol (SRP) and Intelligent Protection Switching (IPS) protocol has the advantage of providing a ring network with a method through which failures of nodes and concentrators may be detected and reported to other nodes and concentrators.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of *E-IPS*, to combine a ring network with nodes that are routers, as well as, routers and concentrators adapted to run Spatial Reuse

Protocol (SRP) and Intelligent Protection Switching (IPS) protocol, as suggested by *E-IPS*, with the system and method of Lee et al., with the motivation being to provide the ring network with an method through which failures of nodes and concentrators may be detected and reported to other nodes and concentrators.

Allowable Subject Matter

6. Claims 1-8 and 13-22 are allowed.
7. Claim 23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
8. The following is a statement of reasons for the indication of allowable subject matter:

Independent claims 1, 13, 21, 22, and 23 are/would be allowable since the prior art of record fails to disclose or render obvious the claim limitations regarding the connections of node interfaces to the two concentrators, as well as, the reconnections of the node interfaces in the event of a concentrator failure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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